# COMBINED DISTRICT COUNCILS,

GUISBOROUGH UNION.

# REPORT

FOR THE YEAR 1894

OF THE

## MEDICAL OFFICER OF HEALTH.

W. W. STAINTHORPE, M.D., C.M., D.PH.

## DISTRICTS:

Guisborough Rural.

GUISBOROUGH URBAN.

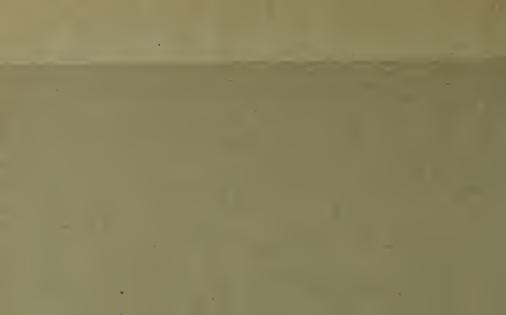
KIRKLEATHAM URBAN.

LOFTUS URBAN.

REDCAR URBAN.

SALTBURN URBAN.

SKELTON AND BROTTON URBAN.





## To the Chairman and Members

OF THE

GUISBOROUGH

Rural District Council.





## TO THE CHAIRMEN AND MEMBERS

OF THE

# Combined District Councils,

#### GUISBOROUGH UNION.

GENTLEMEN,

I have pleasure in submitting for your consideration my report, as Medical Officer of Health, for the year ending December 31st, 1894.

#### Population.

In previous reports I have alluded to the difficulty of estimating the population of a district between any two censuses. This difficulty is enhanced, where, as in this district, the larger portion of the population is engaged in a single industry—ironstone mining,—and hence the number of inhabitants rises or falls with the fluctuations in that industry.

Though the natural increase of the population —i.e., the excess of births over deaths—was 603, it cannot be assumed that the population has been increased by this number, as there is only a limited demand for workers of either sex, consequently numbers of young persons leave the district for work elsewhere. As compared with the previous year. I do not think that there has been any marked increase or decrease in the population. I have estimated the populations of the Guisborough rural district and the Saltburn urban district to be the same as those of last year. The population of Guisborough urban district is estimated to be slightly less, and those of Kirkleatham, Loftus, Redcar, and Skelton and Brotton urban districts slightly more.

#### Infectious Diseases.

During the year 405 cases were reported under the Notification Act, a decrease of 139 in the number notified the previous year. This Act still remains a dead letter so far as regards the duty imposed upon householders, requiring them to report to the Health Officer the existence of any case of infectious disease included in the Act.

It is commonly supposed that the occurrence of a case of infectious disease in a house argues the existence of some insanitary condition on or near the premises. This is by no means the case. Infectious disease is the result of the invasion of the body by a specific matter which there is reason to believe consists of small living bodies (micro-organisms). A case of infectious disease therefore argues the pre-existence of a case of the same, though we may not be able to trace the chain by which they are connected. In saying this I do not lose sight of the possibility that cases of certain of the infectious diseases may arise de novo,—that is, without there being any connection with a previous case. This to me is an open question, for it is possible that in the ages past germs which were inocuous evolved disease-producing powers from their environment. Be this as it may, there is no reason to believe that in the present day smallpox, scarlet fever, measles, and whooping cough ever arise except from a previous case of the same.

Though an insanitary condition does not originate infectious disease, it may be, and often is, a contributory cause. It may be the channel by which the specific material is conveyed from the infected to the healthy, or it may, by lowering the general health, lower the power of resistance. It is possible that this decreased power of resistance may result in an increased virulence of the specific poison.

To what extent we may be able to succeed in diminishing infectious disease by the removal of conditions prejudicial to health it is at present impossible to say. It seems as if the virulence of scarlet fever had diminished of late years. In 1893 the mortality from this fever in the Guisborough Union was only 2.6 per cent.; last year it was lower still, viz., 1.4. It is reasonable to suppose that the reduced mortality of this fever, general throughout England, is the result to some extent of improved sanitary conditions.

### Smallpox.

The first case of smallpox during the year occurred at Coatham, in the Kirkleatham urban district, and was notified to me by special messenger on Sunday, July 8th. Within a few hours the patient—an unvaccinated child, two years of age—was removed (the mother accompanying it) to the Isolation Cottage. Vigorous steps were taken to stamp out the disease, re-vaccination being carried out, clothing, bedding, &c., destroyed, the cottage from which the child was removed disinfected, its walls limewashed, and the whole house thoroughly cleansed. No other case occurred in this house. The child succumbed to the disease, which was of the confluent type, three days after its removal. A second case was notified on July 30th, at Warrenby (in the same urban district), and a third (in Coatham) on August 2nd. Both patients were adult females. A fourth case was reported on August 12th, the patient being a young woman living in the cottage adjoining that occupied by the third patient. A fifth was notified on August 14th, this being a son (14 years of age) of the second patient; this lad was vaccinated on August 2nd, vaccination having failed in infancy. In all these four cases the disease was of an extremely mild type, there being little or no constitutional disturbance. In fact, the third patient would not have sought medical advice had she not been recommended to do so by a neighbour, who suspected the nature of the eruption (slight) on her face. All the cases were removed to the Isolation Cottage, re-vaccination, disinfection, &c., being carried out. On August 22nd, it being reported to me by Mr. Howcroft, Inspector of the Kirkleatham urban district, that he had reason to believe a case or cases existed in the cottage adjoining that in which the first case occurred, I visited it and found an unvaccinated girl of 14 covered with the pustules of smallpox, semi-confluent. Here it may be stated that the family refused re-vaccination, which was urged upon them when the first case came under notice. Enquiries elicited the fact that the mother of this girl—a widow-had recently recovered from what there is no doubt was a mild attack of modified smallpox, and that two boys and a lodger, none of them in the house at the time of this visit, had also probably contracted the disease. No practitioner had been in attendance upon any of the cases in this house. It happening that a special meeting of the Kirkleatham Board was to be held that day, I reported the above at that meeting, and was instructed to take all such steps as I considered necessary to stamp out the disease. A guard was at once placed over the house, with instructions to oppose the entrance into it of any but occupants, and to prevent anyone leaving it. At a second visit, in the evening of the same day, the two boys, who had then returned home, were found to have the eruption of smallpox upon them, and they and the girl were at once removed to the Isolation Cottage. An elder daughter had also returned home from charing; she, however, showed no sign of the disease. On visiting the infected house next morning it was ascertained from the guard that the lodger had not returned. With the assistance of Mr. Howcroft, I was able to trace this man during the morning, he being found on premises in the Redcar district, where he had spent the night in an outhouse on bedding supplied him by the occupiers, who, fortunately for themselves, were unable to accede to his request to provide him with a bed in the house. His face being covered with pustules of smallpox, he was at once removed (with the bedding used by him) to the Kirkleatham Isolation Cottage. A list of persons for whom the girl living in the infected house had chared was obtained, and these were called upon by me and warned as to the possibility of the disease appearing among them. (It may be stated here that it did not.) I was unable to ascertain any definite information as to the movements of the lodger previous to his removal to the Isolation Cottage. It was found advisable to destroy all the bedding, clothing, &c., in the house, which, fortunately, was neither much nor valuable. It is unnecessary to recapitulate the various steps taken to stamp out the disease, reported to the Board in the usual course. Suffice it to say they were successful, no other case occurring either in their district or in any other in the Union. For this successful issue I am much indebted to Mr. Howcroft, Inspector of the Kirkleatham district, who rendered valuable assistance.

The origin of the first case and the means by which the disease spread remain to be considered.

When making enquiries as to the source of the infection in the first case it soon became apparent that, for some reason which could not be divined, a desire existed to conceal the true facts. Subsequently, however, it was definitely ascertained that the child had been brought from Leeds about 12 days before the beginning of its illness. Further enquiry showed that this child had been directly or indirectly in contact with persons suffering from smallpox in that

town. In discussing the origin of the next two cases it will be necessary to state briefly the position of the houses in which they occurred as regards their distance, &c., from the Isolation Cottage. This building, which stands on ground to the south of the road leading from Coatham to Warrenby, forms the apex of an unequal triangle, of which the two houses in which the two cases referred to occurred form the other two angles. One side of this triangle, that between the Isolation Cottage and the house in which the first (Mrs. M.) of the two cases occurred is 380 yards long; the second side, that between the Isolation Cottage and the house in which the second (Mrs. R.) existed is 260 yards long; the base of the triangle i.e., the line between the two infected houses is the road leading from Coatham to Warrenby, and is 593 yards long. There are no buildings on the space enclosed by the triangle, nor along the lines forming the two sides of it. At one end of the base line there are three houses nearer the Isolation Cottage than that occupied by Mrs. M.; at the other end there is one nearer than that occupied by Mrs. R. The bedding, &c., removed with the first case was burnt on land (on July 9th) close to the Isolation Cottage; at the time the wind was blowing towards Warrenby, where it will be remembered Mrs. M. (the second case) resided. This person is the proprietor of a "general" shop, and from that shop paraffin oil (wherewith to hasten the destruction of the bedding, &c.) was obtained (on July 9th) by one of the Board's workmen, who had been employed the previous day in removing the bedding. The paraffin was not served by Mrs. M., though she was in the shop at the time. It was ascertained that Mrs. M. and Mrs. R. were simultaneously attacked, or at least within a few hours of each other, the illness in each commencing 13 days after the removal of the first case to the Isolation Cottage. Granting the period of incubation to be the same in each, and, in my experience, this is less variable in smallpox than in other infectious diseases, the channel of infection would appear to be alike in each. No direct connection between the case removed to the Isolation Cottage and these two (Mrs. M. and Mrs. R) could be traced. In the case of Mrs. M., then, there were three possible channels of infection:-first, the conveyance of the infective material by the workman when he purchased the paraffin oil; second, the dissemination through the air of the specific poison from the Isolation Cottage; third, dissemination similarly from the burning bedding, &c. In the case of Mrs. R. the sources of infection, so far as could be ascertained, are limited to the second and third of the above-mentioned. In the fourth the disease was contracted from the third, in the fifth from the second, and in the remaining four from the first.

I have reported somewhat at length on the probable sources of infection, as one of these (the second) has an important bearing upon the question of hospital accommodation for cases of smallpox. Facts have been brought forward in connection with outbreaks of this disease pointing strongly to the probability that it may spread by dissemination through the air from buildings in which such cases are isolated. An epidemic of smallpox which occurred in Guisborough in the year 1885 there is little doubt was due in the first instance to aërial dissemination. Two tramps were under treatment for this disease in the workhouse: 17 days after the second had been admitted two cases occurred in houses in the rear and close to the workhouse. In this instance also it was ascertained that the patients were attacked within a few hours of each other.

#### Scarlet Fever.

Scarlet fever prevailed extensively at Brotton, and also at Guisborough, though not so largely. At the former place 131 cases in 90 houses were notified, at the latter 99 cases in 61 houses. The attack rate per 1,000 of the population was, in Brotton 36.65, in Guisborough 17:36. Comparing the percentage of houses infected as better indicating the spread of the disease, this is found to be, in Brotton 13.1, in Guisborough 5.3. The number of houses in which single cases occurred was, up to the end of the year, in Brotton 74, in Guisborough 33. In Guisborough the epidemic began to decline in the last quarter of the year, in Brotton it rose considerably, 65 cases being notified during November and December, compared with 10 in Guisborough. In both places the type of disease was mild. I have frequently seen, especially in Brotton, the affected children up and about within three or four days of the date of notification. In many instances the patient has never been confined to bed. One child was ascertained to have walked to a village about two miles distant within a few days of the date of the notification. This mildness of type there is no doubt has been an important factor in the propagation of the fever. Why the disease spread so much more in Brotton than in Guisborough I am unable to say. In both places it had been prevalent in the year 1893, in neither had there been for many years any severe outbreak. Its greater prevalence in Brotton

was not therefore due to any appreciable difference in the number of susceptible persons. As there had been in Brotton a larger number of cases in 1893, both relatively (to population) and numerically, it may be supposed that its greater spread there arose from the consequently larger number of centres of infection. This, however, is not probable, for during the months of April, May, and June the number of cases were respectively 1, 3, 1, whilst during July no case was notified. Nor was the greater spread of infection due to any difference as regards means of isolation. In neither place is any hospital provided for isolating cases of scarlet fever, and no material difference exists between the two places as regards the class of houses infected. In both the number of cases in which isolation, even of the most rudimentary nature, could be carried out was so small that for the purpose of comparison they may be left out of consideration. At the census of 1891 the average number of persons per house was, in Brotton 5:23, in Guisborough 4.93. These figures may be taken as applicable to the present time. The larger number of occupants per house in Brotton, together with the fact that some go per cent. of the cases occurred in cottages with only two bedrooms might appear to account to some extent for the greater prevalence. The primary effect of these conditions would be a proportionately larger number of houses in Brotton in which more than one case occurred. This, however, was not so; the reverse was the case. Seasonal influence presumably was not a factor, for while in the last quarter of the year there was a great increase in the number of cases in Brotton, in Guisborough there was a decrease. As regards "school influence" Brotton and Guisbro' are alike. In both, children living in infected houses are excluded from school, action in this respect being taken in accordance with Art. 88 of the Education Code, 1894. Moreover, in 16 of the houses (in Brotton) in which cases were reported during the last two months of the year, the first patient was a child under four years of age. The possibility that contaminated milk might be a cause of the spread of the disease was considered and enquired into, but no evidence was forthcoming implicating any milk-supply. Nor am I aware of any condition specially existing in Brotton rendering children more susceptible. There is no appreciable difference in the sanitary condition of the two places, nor in the state of trade which indirectly might affect the general health. Physiographically, Brotton, which lies on the slope of a hill, is better placed from a health point of view, than Guisborough, which is almost surrounded by hills

North Skelton, with a population of about 1100, is within a mile and a quarter of Brotton; here only 3 cases were reported during the year; at New Skelton, 13 miles from Brotton, no case; at Skelton, about two miles from Brotton, one case. In the adjoining district of Loftus, about two miles away, with a population of 5450, 13 cases were notified; in Saltburn, also about two miles distant, one case. The combined populations of these places is about 12,000, the attack rate per 1000 of the population being about 2.5, compared with 36.65 in Brotton.

Since the beginning of December the schools at Brotton have been, as suggested by me, disinfected weekly.

The desirability of including disinfection in the ordinary process of the cleansing of schools is a matter which might well engage the attention of school authorities.

The only other place in the Union in which the disease prevailed was Guisborough, the attack rate being 17.36. As before stated, the fever declined considerably towards the end of the year.

These outbreaks prove conclusively that without adequate means of isolation it is impossible to stamp out this disease.

The disinfection of houses after the recovery of the patients cannot be carried out in such a manner as to be effective, as without means of temporarily housing the family, the living room, which in the majority of instances is occupied by the patient during convalescence, cannot be disinfected.

#### Diphtheria.

Thirty-one cases of diphtheria were notified during the year:—viz., ten in the Guisborough urban district, one in the Kirkleatham, two in the Loftus, and eighteen in the Skelton and Brotton. On January 9th three cases in one house in the Guisborough urban district were reported, two of which proved fatal. Enquiry showed that the disease had been imported from a distance. A fourth case occurred in the same house on April 9th, and a fifth on May 14th; this last was removed for isolation to the Eston Sanatorium. On January 20th a case was notified in another house in the same district; it was ascertained to be just possible that the infection had been indirectly conveyed from the house in which the above cases occurred, though I am of opinion it was not. In the same district two were reported

during February, one in March, and one in July, this last being imported. In no house except the first-mentioned did a second case occur.

In November a case was reported in the Kirkleatham district. As the patient's employment was in a neighbouring town, it is possible that the infection was contracted there.

In July a death from post-diphtheritic paralysis took place in the Loftus district. The early symptoms in this case were so slight and ill-defined that the exact nature of the disease could not be diagnosed. In the same district a case was reported on October 29th, which ended fatally; in this house another child had previously been ailing, but the symptoms did not point to diphtheria, there being no sign of membrane on the throat, slight paralysis subsequently developed in this child. Another case in the same house was reported on November 10th; the cause or source of infection could not be traced. Up to the present the disease has not spread.

All the eighteen cases in the Skelton and Brotton district occurred in the Brotton sub-district. Of these, five occurred in (4) houses where at the time there were cases of scarlet fever. In two others the patients were at the time suffering from scarlet fever. It is somewhat remarkable that in only two houses was a second member of the family attacked, and that in both of these there existed at the time, or had recently been, cases of scarlet fever. In addition to the above, two cases were reported as "scarlet fever and diphtheria," one of these being in a house where one member was notified as suffering from diphtheria and others from scarlet fever; in the other the case has not up to the present been followed by a second case of either of the diseases.

In attempting to trace the source or channel of infection in an outbreak of diphtheria one obstacle may frequently present itself—viz., the fact that previous cases of the disease have existed in which the local symptoms were so mild as to give rise to no suspicion that they were diphtheria; these not coming under observation, the chain linking the outbreak with its source becomes broken. Expression to this feeling was given at the Public Health Congress, held in London last July, by the passing of the following resolution:—

"That the Local Government Board, the Metropolitan Asylums Board, and the various County "Councils have their attention called to the importance to the public of the early recognition "and accurate diagnosis of Diphtheria, and that they be asked to afford Medical men "facilities for obtaining such bacteriological assistance as may lead to the prompt recognition "of the disease."

The Local Government Board has undertaken, I understand, to render such assistance where it considers the circumstances of individual districts require it.

The Metropolitan Asylums Board has decided that a bacteriological examination of the fauces of patients suffering from diphtheria—both when they come into and are discharged from their hospitals—is advisable. The examination before discharge is carried out for the purpose of ascertaining whether or not the throat is free from infective organisms, it being now known that these may remain on the fauces for weeks after the recovery of the patient.

#### Membranous Croup.

Two cases only of membranous croup were notified, both in the Skelton and Brotton district. One (in Brotton) ended fatally.

#### Enteric Fever.

Thirty-six cases of enteric fever were reported during the year, three less than in 1893. Of these, eight occurred in the Guisborough urban district (two of which were imported); nine in the Kirkleatham district (one imported); four in the Loftus (one imported); two in the Redcar (both imported); one in the Saltburn; and twelve in the Skelton and Brotton, one of which occurred at Boosbeck, two at Lingdale, five at North Skelton (in three houses), and four in Brotton. In 27 of the 31 houses in which cases existed, no second case was reported. Three of the cases in Guisborough occurred in Bennison Street, two of them being in one house; when reporting these I stated it to be probable that some connection existed between them and the filthy condition of the plot of land at the rear of Bennison Street, upon which there are a number of pig-sties and fowl-pens. Notices have been served for the abatement of this nuisance.

In the Kirkleatham district, with the exception of an imported case in September, none was reported until November 21st. Between that date and December 22nd nine were notified. The first of these was in a cottage at the rear of Newcomen Street. Enquiries elicited the fact that the patient, a young man, had, a day or two before, and being ill at the time, come thither from Marsh Farm, Warrenby, a dairy farm in the occupation of a

registered milk-purveyor. This patient was at once removed to the Isolation Cottage. Inspections of and enquiries at Marsh Farm did not reveal any condition to which the disease could positively be attributed, nor was there any history of any previous case of illness. The water supply-from a well-was not, on account of the nature of its surroundings, above suspicion. My recommendation that the town's water should be laid on was carried out within a day or two. The second case was reported on November 23rd, the third and fourth on December 1st, the fifth on the 10th, the sixth on the 13th, the seventh on the 20th, the eighth on the 22nd. The second, sixth, and seventh occurred in Coatham; the others in Warrenby. The eighth case occurred at Marsh Farm, the patient being a brother of the first patient. In the second, fourth, fifth, and seventh cases milk was obtained from Marsh Farm. On December 7th-up to which time it will be noted that four cases had been notified—I reported to the Authority, at its monthly meeting, that suspicion attached itself to the milk supplied from Marsh Farm as being a means of spreading the disease. On the 18th I received information of two cases of illness of a typhoid type (both were subsequently notified as enteric fever), one being at Marsh Farm (the eighth case), the other in a house at Coatham (the seventh case), to which milk was supplied from Marsh Farm. Steps were thereupon at once taken, under the Infectious Diseases (Prevention) Act, to stop the sale of milk from this dairy, an order to this effect being made by the Authority at a special meeting held on December 21st. On visiting Marsh Farm I found the patient lying on a bed in the room (kitchen) in which the milk vessels were cleansed; he was removed to the Isolation Cottage. The origin of the first case is somewhat obscure. The following facts point to a possible source:—A case of illness occurred in a house in Coatham about the end of the first week in November, accompanied by high temperature and looseness of bowels. It may be noted here that the seventh case also occurred in this house. It was ascertained that during the delivery of milk there from Marsh Farm soiled linen was taken in the milk cart for conveyance to a The first patient attacked assisted in the delivery of the milk and the removal laundress. of the linen.

Up to the present time (January 31st) only two other cases have been notified, both in one house. In this it was found that the illness dated from the end of December, and that the milk supply had been from Marsh Farm.

In two of the cases in the Loftus district the patients were members of the same family, and living in the same house as the three which occurred in the autumn of 1893. The recurrence of the disease six months afterwards is somewhat remarkable, especially when it is remembered that the cottage in which the cases occurred is one of a long row of houses, all built alike, having the same water supply and the same drainage and closet system, and that in none other of these did any case occur either in 1893 or 1894. Two members of the family died, one in 1894, the other in the previous year. After the cessation of the fever in 1893 the house, bed, bedding, &c., had been thoroughly cleansed. The following facts point to a possible cause of the recurrence of the disease. It was usual to swill the yard with rain water, but as the supply of this ran short (the rainfall being very low in 1893), water in which clothes had been washed was used for the purpose. It is possible that in this way the specific organisms from the soiled linen of the patients were washed into the ground through the spaces between the bricks with which the yard was paved. Removal of some of these bricks showed plainly that filth had been so washed through. The family were removed from the cottage, which was thoroughly disinfected and the yard pavement relaid.

The two cases in Redcar were imported; in both the disease seems to have been contracted at Bishop Auckland. In several instances during the last two or three years the source of infection has been traced to this place.

#### Measles.

The number of deaths (2) from this disease was less than it has been for many years past. A sharp outbreak occurred at Lingdale in the autumn; no deaths, however, resulted.

#### Diarrhœa.

Last year I had to chronicle a large increase in the number of deaths from diarrhæa. This year only two deaths were certified as arising from it. There is no doubt that this decrease is due to the different climatic conditions which prevailed during the year as compared with those of 1893.

#### Statistics.

The births registered during the year numbered 1,077 (524 males, 553 females), giving a birth rate of 27.46 per 1,000, compared with 28.74 in the previous year. The deaths numbered 474 (233 males, 241 females), giving a death rate of 12.08, this being the lowest recorded since the Combination included the whole of the districts in the Union. Particulars as to the birth and death rates, &c., in each of the districts are given in Table C.

The deaths from zymotic diseases, including diarrhæa, numbered 22 (compared with 92 in 1893 and 37 in 1892), which is at the rate of 0.56 per 1,000 of the population. This decrease is largely due to the reduced number of deaths from diarrhæa. With the exception of diphtheria, there was a decrease in the number of deaths from the other diseases, scarlet fever causing 4 deaths, as against 11 in 1893; membranous croup 1, as against 3; enteric fever 4, as against 10; whooping cough 3, as against 13.

Diphtheria was certified as the cause of 5 deaths; 36 deaths were registered as due to consumption, an increase of 3 over the number registered in the previous year, whilst there was a slight decrease in the number of deaths due to lung diseases other than consumption—viz. 87, 10 less than in the previous year.

In the number of deaths of children under 5 years of age there was a decrease—177 as compared with 252 in 1893.

It is a common error to assume that because the death rate of a district is lower than that of another district, the former is necessarily the healthier. There are other factors influencing the death rate which require to be considered. For instance, a district containing a proportionately larger number of elderly people will, other things being equal, have a higher death rate than a district with a smaller number. A suburb consisting mainly of betterclass residences will contain a large number of domestics, and as the ages of the latter will be within those age-periods in which the least number of deaths occur, the death rate of such a place will thereby be lowered. It is almost unnecessary to say that the social status of the inhabitants of any place is an important factor in its death rate. A high birth rate increases the death rate, at least for a time, but in 10 to 15 years, presuming that there is no marked emigration of young persons, the death rate will become lower, inasmuch as there will then be a large number of persons between the ages of 5 and 25, during which period the incidence of mortality is at its lowest. Inversely, a low birth rate at first lowers the death rate, but after a lapse of years increases it, the number of persons between the ages of 5 and 25 being small. Another factor in the death rate is the nature of the industry or industries carried on in the district.

#### Inspections.

Systematic inspections in all the districts have been made by me during the year, many being from house to house. Any conditions which threatened to affect injuriously the public health were noted and reported to the respective Authorities, either directly in my own monthly reports or indirectly through the Inspectors.

Table E contains particulars, supplied by the Inspectors, of the number and nature of the nuisances abated, &c.

Over 250 special visits were made by me, the majority being in connection with the cases of infectious disease reported.

#### Isolation Hospital Accommodation.

In the beginning of the year the Skelton and Brotton Authority obtained and furnished a cottage in which to isolate cases of smallpox; this cottage is in charge of a caretaker, whose wife acts as nurse when required. With this exception, nothing has been done during the year for the further provision of means of isolating cases of infectious disease. Some of the Authorities thought it desirable that the question should be dealt with by the County Council, under the Isolation Hospitals Act, 1893, others decided to defer the question to their successors, the District Councils.

The provision of accommodation for isolating infectious cases is one of the most important subjects which the District Councils will have to consider.

In none of the districts is there any efficient apparatus for the disinfection of clothing, bedding, &c. At the recent Sanitary Institute Congress held in Liverpool a cheaper form of disinfecting apparatus was exhibited, which appears to be as efficient as the more costly.

### Milk-shops, Cow-sheds, &c.

The making of regulations with regard to these is having the attention of the Guisborough Rural, and the Kirkleatham, Loftus, Redcar, and Saltburn Urban Councils at the present time. This matter was brought before the Guisborough Urban Authority, but they decided not to take any steps therein, leaving the question to be considered by the District Council. The Skelton and Brotton Authority decided to do the same; the fact that there does not exist a register of purveyors of milk, &c., in the latter Authority's district was brought under its notice; this matter also was left for the new Council's consideration.

#### Housing of the Working Classes Act.

Under this Act three houses were condemned by me as unfit for habitation—two in the Skelton and Brotton district, and one in the Loftus. One has undergone some repairs, and another is now being repaired, steps are being taken at the present time to have the third closed.

#### SANITARY LEGISLATION.

The Local Government Act of 1894, commonly called "The Parish Councils Act," is an extension of the system of Local Government begun in 1888. So far as regards sanitation, the Act does not confer upon sanitary authorities, now termed district councils, any new powers, unless the powers, duties, and liabilities relating to the execution of the Infant Life Protection Act, and the powers, duties, and liabilities in relation to the licensing of knackers' yards can be said to be such.

Under Section 25, Sub-section 5, the Local Government Board may, by general order, direct that rural district councils shall also have such powers, duties, and liabilities as apply to urban sanitary authorities under the Public Health Acts or any other Act; this power is in addition to, and not in substitution for, the powers conferred on the Local Government Board by Section 276 of the Public Health Act of 1875.

The powers conferred on the Local Government Board by the said section may be exercised on the application of a county council, or with respect to any parish or part of a parish on the application of the parish council of that parish. Although parish councils are not invested with the administration of the Public Health Acts, the powers assigned to them by the Parish Council Act places them in the position of doing much to improve the public health. For example, by sub-section 2 of Section 6—

"A Parish Council shall have the same power of making any complaint or representation as to unhealthy dwellings or obstructive buildings as is conferred on inhabitant householders by the Housing of the Working Classes Act, 1890, but without prejudice to the powers of such householder."

A parish council also has power to utilise any well, spring, or stream within its parish, and to provide facilities for obtaining water therefrom; and to deal with any pond, ditch, &c., containing matter likely to be prejudicial to health.

#### By Section 15-

"A rural district council may delegate to a parish council any power which may be delegated to a "parochial committee under the Public Health Acts, and thereupon those Acts shall apply as if the "parish council were a parochial committee, and where such district council appoint a parochial "committee consisting partly of members of the district council and partly of other persons, those "other persons shall, where there is a parish council, be selected from the members of the parish "council."

#### Section 16 says-

- "(1.) Where a parish council resolve that a rural district council ought to have provided the parish with "sufficient sewers, or to have maintained existing sewers, or to have provided the parish with a "supply of water in cases where danger arises to the health of the inhabitants from the insufficiency or unwholesomeness of the existing supply of water, and a proper supply can be got at a reasonable cost, or to have enforced with regard to the parish any provisions of the Public Health Acts which it is their duty to enforce, and have failed so to do, or that they have failed to maintain and repair any highway in a good and substantial manner, the parish council may complain to the county council, and the county council, if satisfied after due inquiry that the district council have so failed as respects the subject matter of the complaint, may resolve that the duties and powers of the district council for the purpose of the matter complained of shall be transferred to the county council, and they shall be transferred accordingly.
- "(2.) Upon any complaint under this section the county council may, instead of resolving that the duties and powers of the rural district council be transferred to them, make such an order as is mentioned in section two hundred and ninety-nine of the Public Health Act, 1875, and may appoint a person to perform the duty mentioned in the order, and upon such appointment sections two hundred and ninety-nine to three hundred and two of the Public Health Act, 1875, shall apply with the substitution of the county council for the Local Government Board.
- ' (3.) Where a rural district council have determined to adopt plans for the sewerage or water supply of "any contributory place within the district, they shall give notice thereof to the parish council of any parish for which the works are to be provided before any contract is entered into by them for the "execution of the works."

TABLE A.

Number of Cases of Infectious Diseases notified during the year in each of the districts.

	Gisbro' Rural.		Kirklea- tham Urban	Loftus Urban.		Saltb'rn Urban.		Totals.
Smallpox	0	0	8	0	I	0	0	9
Scarlet Fever	II	99	2	13	2	I	146	274
Diphtheria	0	10	1	2	0	0	18	31
Membranous Croup	0	0	0	0	0	0	2	2
Enteric Fever	0	8	9	4	2	I	12	36
Continued Fever	2	0	0	0	0	I	2	5
Erysipelas	3	8	3	8	I	4	21	48
Totals	16	125	23	27	6	7	201	405

TABLE E.

Number and Nature of Nuisances abated, &c.

	Guisboro' Rural	Guisboro' Urban.	Kirlea- tham- Urban.	Lcftus Urban.	Redcar Urban	Saltburn Urban.	Skelton and Brotton Urban.
House Yards re-laid or)	21	14	10	5	12	16	47
Drains or Drain Traps,	18	26	66	2	15	33	18
Pails and W.C.'s substi- tuted for ordinary closets	7	20	10	0	6	II	2
Closets, Ashpits, &c.,	9	10	34	3	18	9	7
Other defects remedied and nuisances abated	15	30	39	4	10	15	33
Rooms disinfected	IO	81	45	13	4	2	75
Totals	80	181	204	27	65	86	182

Attack Rate of each of the Infectious Diseases (notifiable) and Mortality Rate from the same and other diseases, per 1000 of the population. TABLE B

Note.—Cases in which the patients were visitors who had contracted infection before coming into the district are not included.	Skelton and Brotton	Saltburn	Redcar	Loftus	Kirkleatham	Guishorough Urban	Guisborough Rural		
ases in	0	0	0	0	2.11	0	0	Smallpox.	
which	23.72	0	0	2.38	0.47	17:52	1.57	Scarlet Fever.	
the par	1.55	0	0	0.55	0.23	1.76	0	Diphtheria.	by-n
tients w	0.12	0	0	0	0	0	0	Membranous Croup.	ATTACK RATE
ere vis	1.03	0.40	0.34	0.73	1.88	1.23	0	Enteric Fever	RATE.
itors wl	0 17	0.40	0	0	0	0	0.58	Continued Fever.	
ho had	1.81	1.63	0.34	1.46	0.70	1.41	0 42	Erysipelas.	
conti	-	,	1		1				
racted	0	0	0	0	0.23	0	0	Smallpox.	
infect	0.34	0	0	0	0	0	0	Scarlet Fever.	
ion bef	0 08	0	0	0.36	0	0.35	0	Diphtheria.	
ore con	80.0	. 0	0	0	0	. 0	0	Membranous Croup.	
ning int	0.08	0	0	81.0	0.23	0.17	0	Enteric Fever.	Mor
the c	0.08	0	0	0	0	0	0 14	Measles,	MORTALITY RATE
listrict a	0.12	0	0	0	0	0	0.14	Whooping Cough.	RATE.
ure not	0	0	0	0	0	0.12	0.14	Diarrhœa.	
include	0.95	1.22	0.69	0.36	1.41	o·88	1.00	Phthisis.	
d.	2.16	0.40	I.04	2.71	2.82	2.47	2.42	Bronchitis, Pneumonia, and Pleurisy.	
	0.86	1.22	1.39	0.18	0.47	0.70	0.57	Heart Disease.	

TABLE C.

Birth and Death Rates, and the Mortality at different age periods in the several districts.

		Guisbro' Rural.	Guisbro' Urban.	Kirk- leatham Urban.	Loftus Urban.	Redcar Urban.	Saltburn Urban.	Skelton & Brotton Urban.	Totals and Means.
Pop	pulation	7000	5650	4250	5450	2860	2450	11,550	39,210
Nu	mber of births	M. 115 F. 110	м. 68 F. 90	M. 45 F. 50	м. 59 <b>ғ.</b> 61	M. 39 F. 26	M. 21 F. 18	M. 177 F. 198	M. 524 F. 553
		225	158	95	120	65	39	375	1077
Bir	th rate	32.14	27.96	22.32	22.01	22.43	15.91	32.46	27.46
Nu	mber of Deaths	м. 48 ғ. 54	M. 25 F. 31	M. 27 F. 30	M. 33 F. 27	M. 15 F. 10	м. 8 F. 13	M. 77 F. 76	M. 233 F. 241
		102	56	57	60	25	21	153	474
Dea	ath rate	14.22	9.91	13.41	11.00	8.74	8.57	13.54	12.08
Zyı (ınd	motic death rate cluding diarrhœa)	0.24	0.40	0.47	0.22	0.00	0.00	o·86	0.26
iı 1	oportion of deaths n children under year of age to each 100 births		6.35	11.22	15.00	6.15	7.69	12.59	11.34
i: 5	oportion of deaths n children under g years of age to each 100 deaths	-0	23.51	31.57	41.66	32.00	25.00	45.09	37*34
ds:	Under 1 year of age	30	10	11	18	4	3	46	I 22
age periods:	Over 1 & under 5	9	3	7	7	4	2	23	55
	Over 5 & under	4	3	0	2	0	0	IO	19
at subje	Over 15 & under 25	5	3	2	3	0	3	12	28
Mortality at subjoined	Over 25 & under 65	22	16	24	12	7	6	33	I 20
Me	65 and over	32	21	13	18	10	7	29	130

# TABLE D. ned causes, distinguishing deaths of children

Mortality from subjoined causes, distinguishing deaths of children under 5 years of age.

SMALLPOX			J 7 00.1						
Under 5 0 0 1 0 0 0 0 0 0 0 1 Over 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0				leatham				and Brotton	Totals.
Under 5 0 0 1 0 0 0 0 0 0 0 1 Over 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SMALLPOX								
Over 5		0	0	ı	0	0	0		т
SCARLET FEVER	Over 5			1				1	
SCARLET FEVER	1 0 101 5	ŭ		_					
Under 5 o o o o o o o o o o o o o o o				I					I
Under 5 o o o o o o o o o o o o o o o	CCADIET FEVER								
Over 5 o o o o o o o o o o o o o o o	Under s	_							_
DIPHTHERIA	Over 5								
DIPHTHERIA   Under 5   O   O   O   O   O   O   O   O	Over 5	U			0	0	0	3	
DIPHTHERIA					1				
Under 5	TOTAL			<del></del>				-4	_ 4
Over 5 0 2 0 0 0 0 0 0 2 2 1 5 5 MEMBRANOUS CROUP Under 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0									
MEMBRANOUS CROUP   Under 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Under 5						1		
MEMBRANOUS CROUP Under 5	Over 5	0	2	0		0	0	0	
MEMBRANOUS CROUP Under 5         0			<u> </u>						
Under 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			2		2			I	_5
New Color   Section   Color   Color									
ENTERIC FEVER  Under 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Under 5				0			I	
ENTERIC FEVER  Under 5 o o o o o o o o o o o o o o o	Over 5	0	0	0	0	0	0	0	0
ENTERIC FEVER  Under 5 o o o o o o o o o o o o o o o									- (
Under 5        0        0       0       0       0       0       0       0       0       0       0       0       0       0       0       0								I	_ I
Over 5	ENTERIC FEVER								
Over 5		0	0	0	0	0	0	0	0
MEASLES Under 5 0 0 0 0 0 0 0 0 1 1 0 0 0 0 0 0		0	I	I	I	0	0	1	4
MEASLES         Under 5           0			_		_			_	
MEASLES         Under 5           0			1	I	I			I	4
Under 5 o o o o o o o o o o o o o o o	MEASLES								
Over 5          I         O         O         O         O         O         O         I<	Under 5	0	0	0	0	0	0	т	I
WHOOPING COUGH	Over 5					l t			
Note	J		· ·	J					
WHOOPING COUGH         Under 5		т				}		т	1
Under 5   1   0   0   0   0   0   0   0   0   0	WHOODING COUGH								
Over 5 o o o o o o o o o o o o o o o	Under 5			_					
DIARRHŒA Under 5 I I I O O O O O O O O O O O O O	Onder 5							1	
DIARRHŒA  Under 5	Over 5	0	0	0	0	0	0	0	
DIARRHŒA         Under 5           I         I         0			y						
Under 5 o o o o o o o o o o o o o o o	DI DELL'ON					i		2	_3
Over 5 o o o o o o o o o o o o o o o	DIARRHŒA								
PHTHISIS  Under 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0				0	0				
PHTHISIS  Under 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Over 5	0	0	0	0	0	0	U	0
PHTHISIS  Under 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0									-
Under 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		I	I						2
Over 5        7       5       6       2       2       3       11       36         BRONCHITIS, PNEU-MONIA, & PLEURISY Under 5        9       4       3       10       2       1       16       45         Over 5        8       10       9       5       1       0       9       42         HEART DISEASE Under 5        0        0<			J						
Over 5        7       5       6       2       2       3       11       36         BRONCHITIS, PNEU-MONIA, & PLEURISY Under 5        9       4       3       10       2       1       16       45         Over 5        8       10       9       5       1       0       9       42         HEART DISEASE Under 5        0        0<	Under 5	0	0	0	0	0	0	0	
BRONCHITIS, PNEU- MONIA, & PLEURISY Under 5 9 4 3 10 2 1 16 45 Over 5 8 10 9 5 1 0 9 42	Over 5	7	į	6		2	3	II	36
BRONCHITIS, PNEU- MONIA, & PLEURISY Under 5 9 4 3 10 2 1 16 45 Over 5 8 10 9 5 1 0 9 42  17 14 12 15 3 1 25 87  HEART DISEASE Under 5 0 0 0 0 0 0 0 0 0 0 Over 5 4 4 2 1 4 3 10 28  INJURIES Under 5 0 0 0 0 1 1 0 28  INJURIES Under 5 0 0 0 0 1 1 0 2 4 Over 5 3 2 0 1 0 2 3 11  3 2 0 1 0 2 3 11  ALL OTHER DISEASES Under 5 28 8 14 12 5 4 45 116 Over 5 40 19 21 25 10 8 47 170		-		_				Y -	
BRONCHITIS, PNEU- MONIA, & PLEURISY Under 5 9 4 3 10 2 1 16 45 Over 5 8 10 9 5 1 0 9 42  17 14 12 15 3 1 25 87  HEART DISEASE Under 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		7	5	6	2	2	3	II	36
MONIA, & PLEURISY Under 5 9 4 3 10 2 1 16 45 Over 5 8 10 9 5 1 0 9 42  17 14 12 15 3 1 25 87  HEART DISEASE Under 5 0 0 0 0 0 0 0 0 0 Over 5 4 4 2 1 4 3 10 28  INJURIES Under 5 0 0 0 0 1 1 0 28  Under 5 0 0 0 0 1 0 28  INJURIES Under 5 0 0 0 0 1 0 2 3 11 Over 5 3 2 0 1 0 2 3 11  ALL OTHER DISEASES Under 5 28 8 14 12 5 4 45 116 Over 5 40 19 21 25 10 8 47 170	BRONCHITIS. PNEU-								
Under 5 9 4 3 10 2 1 16 45 Over 5 8 10 9 5 1 0 9 42  17 14 12 15 3 1 25 87  HEART DISEASE Under 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	MONIA, & PLEURISY								
Over 5        8       10       9       5       1       0       9       42         HEART DISEASE Under 5        0       1       1       0       2       4       4       0       0       0       1       1       0       2       3       11       0       2       4       4       1       0       0       0       0       0       1       1       0       0       0       0       0       0       0       0	Under 5	9	4	3	01	2	I	16	45
To   To   To   To   To   To   To   To	Over 5	8			5	I	0	9	
HEART DISEASE						_	_		
HEART DISEASE		17	14	12	15	3	1	25	87
Under 5 0 0 0 0 0 0 0 0 0 28	HEART DISEASE		<del>-</del>						
Over 5        4       4       2       1       4       3       10       28         INJURIES       Under 5        0       0       0       1       1       0       2       4         Over 5        3       2       0       1       0       2       3       11         ALL OTHER DISEASES       Under 5        28       8       14       12       5       4       45       116         Over 5        40       19       21       25       10       8       47       170	Under 5	0	0	0	0	0	0	0	0
To   To   To   To   To   To   To   To									
A	]								
INJURIES  Under 5 0 0 0 0 1 1 0 2 4 Over 5 3 2 0 1 0 2 3 11		4	1	2		1	2	1	28
Under 5        0       0       0       1       1       0       2       4         Over 5        3       2       0       1       0       2       3       11         ALL OTHER DISEASES       Under 5        28       8       14       12       5       4       45       116         Over 5        40       19       21       25       10       8       47       170	IMILIBIES				<del></del> -			-	
Over 5      3     2     0     1     0     2     3     11       ALL OTHER DISEASES     Under 5      28     8     14     12     5     4     45     116       Over 5      40     19     21     25     10     8     47     170	Inder 5				,	7		2	1
ALL OTHER DISEASES Under 5 28 8 14 12 5 4 45 116 Over 5 40 19 21 25 10 8 47 70				1	1				
ALL OTHER DISEASES Under 5 28 8 14 12 5 4 45 116 Over 5 40 19 21 25 10 8 47 170	Over 5	3	2	0	1	0	2	3	11
ALL OTHER DISEASES Under 5 28 8 14 12 5 4 45 116 Over 5 40 19 21 25 10 8 47 170									15
Under 5 28 8 14 12 5 4 45 116 Over 5 40 19 21 25 10 8 47 170	ATT OWNER DISEASE	3							. 2
Over 5 $\frac{40}{-}$ $\frac{19}{-}$ $\frac{21}{-}$ $\frac{25}{-}$ $\frac{10}{-}$ $\frac{8}{-}$ $\frac{47}{-}$ $\frac{170}{-}$	ALL OTHER DISEASES								7.6
							4		
-06	Over 5		-				8		170
1 08   27   35   37   15   12   07   200									286
		1 68	27	35	1 37	15	12	1 42	2111

### To the Chairman and Members

OF THE

## Guisborough Rural District Council.

GENTLEMEN,

The number of cases of infectious disease notified during the year was 16 (in 1893 it was 70), viz., scarlet fever 11, continued fever 2, erysipelas 3. It will be noted that the district was entirely free from enteric fever and diphtheria. Of the cases of scarlet fever, five occurred in Marske, five in Wilton parish, and one in Pinchingthorpe.

The number of births registered was 225 (115 males, 110 females), 7 less than in 1893; birth rate 32·14. The deaths numbered 102 (48 males, 54 females), 21 less than in 1893; death rate, 14·57. In the Marske registration district the birth rate was 34·04, the death rate 14·04; in the area comprised in the Danby, Guisborough, and Loftus registration districts the birth rate was 28.57, the death rate 15·35. The deaths from infectious diseases were: measles 1, whooping cough 1, diarrhæa 1, equal to a death rate of 0·55 per 1,000 of the population. The number of deaths in children under five years of age was 39, compared with 57 in the previous year.

The usual systematic inspections were made during the year, the result of these being reported to the Authority at its monthly meetings. The number, &c., of nuisances abated during the year is given in Table E.

A copy of a strongly-worded report, laid by me before the Authority, re the nuisance caused by the unloading, &c., of night-soil at the Marske passenger station, was forwarded to the North-Eastern Railway Company, with an intimation that if the Company persisted in using the siding at this station as a depôt for night-soil, the Authority would be compelled to take legal proceedings. Up to the present there has been no recurrence of the nuisance. I believe the Company are taking steps to provide a depôt some distance from the station.

A certificate was granted under Section 6 of the Public Health (Water) Act, 1878, to the owner of cottages recently erected at Newton.

At Castleton a short branch sewer has been constructed to permit of the discharge into the main sewer of the slop-water from certain cottages.

Under the Local Government Act, 1894, those parts of the parishes of Liverton and Loftus which were within the area of the Guisborough rural sanitary district have been transferred to the Loftus urban district, and that portion of the Easington parish which was included in the Loftus urban district has been transferred to the Guisborough rural district.

The adoption of regulations as to the ventilation, &c., of cow-sheds and dairies is having the attention of the Council.

The adoption of Part 3 of the Public Health Acts Amendment Act, 1890, and the provision of accommodation for the isolation of infectious cases are matters requiring the consideration of the Council.

I am, Gentlemen,

Yours obediently,

Saltburn-by-the-Sea,

W. W. STAINTHORPE.

# To the Chairman and Members

OF THE

## Loftus Urban District Council.

GENTLEMEN,

It will be seen by Table A that during the year 27 cases of infectious diseases were notified (compared with 35 in 1893), of which 13 were scarlet fever, 2 diphtheria, 4 enteric fever, and 8 erysipelas. One of the cases of enteric fever was removed to the Isolation Cottage, the bedroom accommodation in the house where it occurred being limited and the family large. Particulars of the above cases are given in the general report.

The births registered numbered 120 (59 males, 61 females); birth rate, 22 o1. The deaths numbered 60 (33 males, 27 females), 24 less than in 1893; death rate, 11 oo. It is just possible that the population has been over-estimated, and that in this way the death rate is really a little higher than it appears. I do not think, however, that this is so; the population at the census of 1891 was 6208; the death rate is calculated on an estimated population of 5450. The zymotic death rate (including diarrhæa) was 0.55. There was a slight decrease in the number of deaths among children under five years of age. The deaths from infectious diseases were: enteric fever one, diphtheria two.

Inspections of the district have been made as usual; in the majority of these I was accompanied by the Inspector, Mr. Tarbit. Table E shows the number and nature of the sanitary defects remedied during the year.

Inspection of the man-holes showed the sewers to be in good working order. An extra ventilating shaft was affixed to the sewer in High Street, Loftus. The scavenging has been fairly well carried out.

Nothing in the condition of the bake-houses, slaughter-houses, and common lodging-houses, which were inspected, was noted requiring special comment.

The Board adopted regulations *ne* the drainage, ventilation, &c., of cow-sheds and dairies; it has been found necessary to revise these to meet the wishes of the Local Government Board. Bye-laws for the better regulating of the conveyance through the streets of manure and night-soil have been adopted.

Under the Local Government Act, 1894, the area of the Loftus urban district has been altered. Previously the district included parts of the parishes of Liverton, Loftus, Easington, and the whole of the parish of Skinningrove except two small fields. Now the whole of the parishes of Loftus, Liverton, and Skinningrove are included in the Loftus urban district, and the whole of the parish of Easington in the Guisboorugh rural district.

I am, Gentlemen,

Yours obediently,

Saltburn-by-the-Sea,

W. W. STAINTHORPE.

February 8th, 1895.